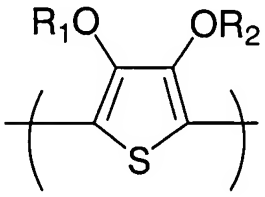
AMENDMENTS TO THE CLAIMS:

Amend the claims as follows:

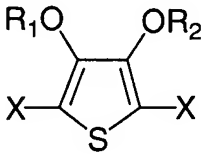
1. (Currently Amended) A process for preparing conductive polythiophenes comprised of structural units of the general formula (1):



(1)

where R_1 and R_2 independently represent hydrogen or a C_1~C_4 alkyl group, or together represent an optionally substituted C_1~C_4 alkylene group, ~~preferably an optionally alkyl-substituted methylene group, an optionally C_1~C_4 alky- or phenyl-substituted 1,2-ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group~~;

said method comprising acid catalysis of ~~which are prepared from~~ 2,5-dihalothiophene of the general formula (2):



(2)

where R_1 and R_2 are described as above in the general formula (1), and X is a halogen atom selected from Cl, Br and I

to produce said conductive polythiophenes;

~~in the presence of an acid catalyst~~said acid being a Lewis acid, a protic acid, an organic acid or a polymeric acid.

2. (Original) A process for preparing polythiophenes according to claim 1, wherein R_1 and R_2 independently represent methylene, 1,2-ethylene or 1,3-propylene.

Claim 3. (Canceled)

4. (Currently Amended) A process for preparing polythiophenes according to claim 1~~claim 3~~, wherein the Lewis acid ~~catalyst~~ is a boron salt, zinc salt, tin salt or iron salt; the protic acid ~~catalyst~~ is phosphoric acid, sulfuric acid, nitric acid, hypochlorous acid, HF, HCl, HBr or HI; the organic acid ~~catalyst~~ is carboxylic acid or sulfonic acid; the polymeric acid ~~catalyst~~ is polystyrenesulfonic acid, polyacrylic acid, polymethacrylic acid, polymaleic acid or polyvinylsulfonic acid; and the catalyst comprises at least one acid~~is used individually or as a mixture of two or more~~.

5. (Currently Amended) A process for preparing polythiophenes according to claim 4, wherein the boron salt is boron trifluoride, boron trifluoride dihydrate, boron trifluoride diethyl etherate, boron trifluoride-alcohol complex, boron trifluoride-methyl sulfide complex, boron trifluoride-phosphoric acid complex, boron trichloride, boron trichloride-methyl sulfide complex, boron tribromide, or boron tribromide-methyl sulfide complex~~, used individually or as a mixture of two or more~~.

Claims 6-7. (Canceled)

8. (new) The process of claim 1 wherein where said optionally substituted C_1~C_4 alkylene group is an optionally alkyl-substituted methylene group, an optionally C_1~C_4 alky- or phenyl-substituted 1,2-ethylene group, a 1,3-propylene group or a 1,2-cyclohexylene group.

9. (new) A process for preparing polythiophenes according to claim 8, wherein the Lewis acid is a boron salt, zinc salt, tin salt or iron salt; the protic acid is phosphoric acid, sulfuric acid, nitric acid, hypochlorous acid, HF, HCl, HBr or HI; the organic acid is carboxylic acid or sulfonic acid; the polymeric acid is polystyrenesulfonic acid, polyacrylic acid, polymethacrylic acid, polymaleic acid or polyvinylsulfonic acid; and the catalyst comprises at least one acid.

10. (new) A process for preparing polythiophenes according to claim 9, wherein the boron salt is boron trifluoride, boron trifluoride dihydrate, boron trifluoride diethyl etherate, boron trifluoride-alcohol complex, boron trifluoride-methyl sulfide complex, boron trifluoride-phosphoric acid complex, boron trichloride, boron trichloride-methyl sulfide complex, boron tribromide, or boron tribromide-methyl sulfide complex.